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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,860	09/06/2006	Meiten Koh	Q96559	4402
23373 7590 04/27/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
BUIE, NICOLE M				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
04/27/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/591,860

**Applicant(s)**

KOH ET AL.

**Examiner**

NICOLE M. BUIE

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 7-8, 15-17, and 20 is/are allowed.
- 6) ☒ Claim(s) 6 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

The amendment filed 01/15/2009 has been entered. Claims 1-17 and 20 remain pending in the application. The previous 112, 2<sup>nd</sup> paragraph, rejection of claims 7, 8, and 20 has been withdrawn in light of Applicants' amendment.

### *Claim Rejections - 35 USC § 102*

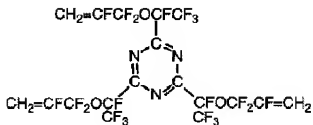
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

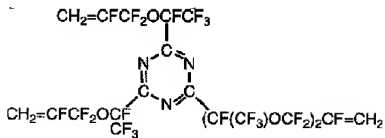
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 6 and 9** are rejected under 35 U.S.C. 102(b) as being anticipated by Morita (JP 10237130 A).

**Regarding claims 6 and 9**, Morita discloses an ionic liquid type functional material [0015] comprising a fluorine-containing polymer containing a nitrogen containing aromatic compound ([0027]-[0030]), such as:





Morita further discloses homopolymerization or copolymerization of a nitrogen containing aromatic compound [0014] (Therefore, for the homopolymer, the amount of M1 is 100% by mole and the amount of A1 is 0 % by mole).

#### *Response to Arguments*

Applicant's arguments filed 01/15/2009 with respect to the rejection(s) of claim(s) 1-5 and 15-17 under 102 (b) as being anticipated by Morita (JP 10237130) and claim(s) 7, 8, and 20 under 102(b) as being anticipated by Armand et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

Applicant's arguments with respect to the rejection(s) of claims 6 and 9 have been fully considered but they are not persuasive. Applicant's argument that the compounds of Morita would not satisfy the limitation "the structural unit M1 is at least one selected from structural units derived from ethylenic monomers having, in a side chain thereof, a moiety represent by the formula (2)" (P12) is not persuasive. Claim 6 does not exclude branched polymers, therefore the limitation about the side chain is met by the polymers taught by Morita. The follow comments apply:

A) Since Morita does not teach or suggest an amino group in the fluoroether moiety, the previous rejection has been withdrawn.

B) Since Armand et al. does not teach or suggest a fluoropolyether, the previous rejection has been withdrawn.

C) Since copending application 11/634538 does not recite the limitation “R<sub>Y</sub> is a mono-, di-, tri- or tetra-valent organic groups having 2 to 30 carbon atoms which has an amino group and/or salt thereof and contains an aromatic ring structure”, the previous double patenting rejection of claim 1 has been withdrawn.

#### *Allowable Subject Matter*

**Claims 1-5, 7-8, 15-17, and 20** are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the closest prior art of record, Morita et al. (JP 10-237130 A) does not teach or suggest a fluorine-containing ether chain with an amino group and/or salt thereof.

#### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE M. BUIE whose telephone number is (571)270-3879. The examiner can normally be reached on Monday-Thursday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. M. B./  
Examiner, Art Unit 1796  
4/13/2009

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/Marc S. Zimmer/

Primary Examiner, Art Unit 1796